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AUTHOR Tyler, Ralph W.
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ABSTRACT

This document discusses the Assessment Policy Committee established to design and supervise the conduct of the National Assessment of Educational Progress (NAEP) and describes the legislation supporting the Committee. It proposes that the governance of NAEP be the responsibility of a board composed largely of educational policy makers, and those influencing policy, with a minority of persons representing educational practitioners, teachers, and school administrators. It recommends that five panels of experts be established to advise the board on: (1) the selection of educational objectives to be assessed; (2) test construction; (3) sampling procedures; (4) reporting and interpreting test performance; and (5) potentials and limitations of educational surveys. When NAEP was transferred from the Education Commission of the States to Educational Testing Service, specialized in-house advisors replaced committees on test construction and analysis. In-house advice is cheaper and more efficient, but has limitations. First, no contractor has the range of experience required. Furthermore, the contractor is influenced by the assumed competence of the internal staff and has little incentive to question the staff's concepts or procedures. A national assessment, like the United States Census or the National Public Health Surveys, requires that its basic concepts and procedures be critically reviewed by experts and laymen from a variety of backgrounds. The appendix includes relevant sections of Public Law 95-561 and Public Law 98-511. (LMO)

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The Governance of the National Assessment
of Educational Progress

Ralph W. Tyler

Center for Advanced Study

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The Governance of the National Assessment
of Educational Progress

by Ralph W. Tyler

In 1978, the U.S. Congress enacted Public Law 95-561 which in Sec. 1242 specified that the authority to design and supervise the conduct of the National Assessment shall be an Assessment Policy Committee established by the educational organization through which the National Institute of Education carries out the National Assessment. The law specifies:

"The Assessment Policy Committee shall be composed of -

"i. five members appointed by the education organization of whom two members shall be representatives of business and industry and three members shall be representative of the general public, and

"ii. twelve members appointed by the education organization from the categories of membership specified in subparagraph (13).

"(B) Members of the Assessment Policy Committee appointed in accordance with division (ii) of subparagraph A shall be:

- (i) one chief state school officer;
- (ii) two state legislators;
- (iii) two school district superintendents;
- (iv) one chairman of a state board of
education
- (v) one chairman of a local school board;
- (vi) one governor of a state;
- (vii) four classroom teachers."

The legislation goes on to specify:

"(3) The Assessment Policy Committee established by paragraph (2) shall be responsible for the design of the National Assessment, including the selection of the learning areas to be assessed, the development and selection of goal statements and assessment items, the assessment methodology, the form and content of the reporting and dissemination of assessment results, and studies to evaluate and improve the form and the utilization of the National Assessment."

"(4) Each learning area assessment shall have goal statements devised through a national consensus approach providing for active participation of teachers, curriculum specialists, subject matter specialists, local school administrators, parents and concerned members of the general

public. All items selected for use in the assessment shall be reviewed to exclude items which might reflect racial, sex, cultural or regional bias."

In 1984, the Congress enacted an amendment clarifying the responsibility of the Assessment Policy Committee for background items collected in the assessment.

This amendment states:

"The appropriateness of all cognitive, background, and attitude items developed as part of the National Assessment shall be the responsibility of the Assessment Policy Committee. Such items shall be subject to review by the Department of Education and the Office of Management and Budget for a single period of not more than 60 days."¹

This legislation recognizes the fact that the National Assessment of Educational Progress requires special treatment because it differs in several important respects from most programs for appraising the educational achievement of American students. Its purpose is to inform those persons responsible for educational policies and those influencing policies about the extent

1. A copy of the Congressional Record containing the full text of the legislation appears in the appendix.

to which students are learning what the schools are expected to teach.

Although the Assessment reports may provide some information useful to teachers and school administrators it is not designed to take the place of the testing and other methods of evaluations used within schools and classrooms to guide instruction and to inform parents about the achievement of their children. This suggests that those who are expected to use the assessment results in policy matters should be represented in a major way in its governance. However, since teachers and school administrators are affected by educational policies, they too should be represented in its governance but not control it.

The legislation recognizes that both professional and lay groups have important interests in the National Assessment and mandates that the governing body, the Assessment Policy Committee, shall be composed of 17 members both professional educators and laymen. This composition of the governing body should be continued. However, a board of governors composed of non-specialists in educational appraisals cannot deal intelligently with many of the issues and problems of the assessment without dependable information on the professional and technical matters involved.

This is particularly relevant to the National Assessment which is different in important respects from appraisals of education that have commonly been reported to the public. The Assessment Policy Committee needs special panels to which it can turn for advice on matters involving special expertise.

When the Assessment Policy Committee began it had the benefit of the advisory committees which had been established to assist the Exploratory Committee on Assessing the Progress of Education to develop the initial assessment program. There was an advisory committee on exercise development, one on analysis, and one on sampling. However, when the responsibility for the conduct of the assessment was transferred to another organization these committees were discontinued. It is recommended that several special panels should now be constituted to advise the governing board, the Assessment Policy Committee, on matters involving special expertise.

One of these panels should be composed of persons who can advise on how to select educational objectives to be assessed. In the case of the initial development of the National Assessment, a three step procedure was followed for each school subject. First specialists in the subject were asked to state what they considered important for students to learn, then school

teachers and administrators were asked to review the list suggested by the specialists and identify what the schools were teaching. Finally, parents and interested laymen were asked to select what they considered important for their children to learn.

Most achievement tests have not been guided in development by a comprehensive effort to identify what students should be learning in each subject. Rather, they are constructed by sampling the contents of textbooks, prepared by individuals whose views may be narrow.

It is important as the National Assessment continues, to be sure that the learning being assessed has been critically reviewed in a comprehensive fashion and is not obsolete nor trivial. For this reason, the governing board should be continually advised by a panel of experts on selecting educational objectives.

A second distinguishing characteristic of the National Assessment is its use of a wide variety of test exercises. These are not limited to multiple-response items nor even to paper and pencil tests. In science, for example, students are asked to set up a laboratory demonstration; in music to play an instrument or

to sing. This great variety of test exercises is made possible by the fact that they do not need to be given all at once to a group of students. Nor do they need to be given in a single class period. For example, students can be asked to write a letter or a report, or an essay that may require more than an hour of writing. This wide range of possibility for test exercises greatly increases the potential validity of the assessment. However, few test constructors have had experience with exercises other than multiple-response and short answer forms of tests. When the original exercises were developed for the National Assessment, two of the organizations that contracted to prepare them were unable to construct valid exercises beyond the paper and pencil tests that they were accustomed to preparing. Hence, it is important for the governing board to have an advisory panel on exercise construction to suggest new types and review carefully the exercises prepared by the assessment contractors.

The accuracy of the assessment results is highly dependent on the quality of the sampling involved. Assessment exercises should be representative samples of the learning being assessed.

Those who take the tests should be representative samples of the populations and the geographic areas for which the results are reported. How to select samples and the sizes of samples

required for different purposes are questions that can best be answered by persons competent in sampling theory and practice. This suggests the need of a panel of sampling experts to guide the governing board.

One of the unusual features in the original assessment was the way in which the exercises were appraised and reported. Most achievement tests appraise exercises as right or wrong and report the test result as the sum of the number right or some factor times the number right or the difference between some factor times the number right minus some factor times the number wrong. Such a scoring procedure gives little information about what students have learned. It is commonly interpreted in terms of norms furnished by those who sell the tests. This tells one only where the student's score lies on a continuum from the lowest score to the highest, and what percent of the students tested in the process of norming made scores lower than this.

The National Assessment does not report the scores of individual students. It reports results for groups, such as all nine year olds, nine-year olds living in inner cities, thirteen year olds living in the Southeast. The report for each group is in terms of the percent of that group whose performances on the assessment exercise is stated. For example, "Forty percent of

the thirteen year old children wrote a letter as good or better than this one" - and a sample of the letter is presented.

Or "ninety percent of the seventeen year old students added, subtracted, multiplied and divided accurately with whole numbers."

Or "forty-four percent of seventeen year olds could work out the amount of sales tax paid on this transaction," and the transaction is described.

When test results are reported in abstract numbers as most achievement tests are, what this means is not understood by many people, including educators as well as laymen. Since the National Assessment is to provide information useful to policymakers they need help in interpreting assessment results. A panel of experts on reporting and interpreting exercise performance should be continually available to assist the governing board.

Because the National Assessment provides unique and important data, it is a prized resource for educational researchers. However, they often want more information than the assessment of

any national survey can provide. Many of them would like to have data that would explain the causes of variations in achievement among groups, and mention such things as the teaching methods used, ways students are grouped for instruction, and the like.

Among the difficulties involved in providing such data are two very serious ones. The cost of adding and processing additional items to a national survey is substantial and the validity of self-reported responses on many of the questions proposed is very low. To illustrate the latter problem, in 1945, a committee of experts was asked to evaluate the activity school experiment in New York City.

Eight years earlier, eighteen schools in that city had been chosen to be activity schools and eighteen schools with comparable student bodies were selected to be controls. The evaluation committee was told that activity schools followed some 61 procedures in classroom instruction, procedures that were different from those followed in traditional schools. However, when the committee staff actually observed the procedures in the classroom, they found that nearly one-third of these classrooms in the activity schools followed less than 15 of these 61 procedures, while thirty percent of the classrooms in the control schools followed more than 50 of the 61 procedures. The school

reports were nearly worthless in identifying activity schools and traditional schools.

Similarly, when in 1970, an evaluation staff was assembled in Isreal to assess the effects of the Israel Educational Reform of 1968, its first step was to ascertain by actual site visitation which of the 62 schools that reported having adopted the reform were actually following the procedures specified in the reform legislation. Only 2 of the 62 schools were doing so.

This lack of validity of self-reports on educational practices is not always due to conscious efforts of school administrators to deceive, in fact, such deception seems to be rare. What usually happens is that general terms are used to label innovations and few practitioners really have clear understanding of these terms, such as, activity schools, desegregated classrooms, open classrooms, rigorous instruction. The governing board of the National Assessment needs advice from panels of experts in educational surveys to avoid committing the assessment to collecting survey data that has little validity and/or adds substantially to the cost.

In summary, it is proposed that the governance of the National Assessment be the responsibility of a board composed

largely of educational policymakers and those influencing policy and with a minority of persons representing the educational practitioners, teachers and school administrators. However, since there are many issues with which the governing board must deal that are special or technical in character, it is recommended that five panels be established to advise the board on matters with which the panels have special competence. The five panels recommended are: (1) the selection of educational objectives to be assessed; (2) the construction of assessment exercises; (3) sampling procedures; (4) reporting and interpreting exercise performance; (5) potentials and limitations of educational surveys.

When the National Assessment began to operate under the Education Commission of the States, the governing board had the benefit of a committee on exercise construction and an analysis committee. The latter dealt with sampling problems as well as the reporting and interpreting of the assessment results. The policy committee used these panels frequently. When the project was transferred to Educational Testing Service, specialized advice was obtained in-house. This is cheaper and appears more efficient. However, the dependence upon the contractor for this advice has two serious limitations. No one contractor, even one as large as Educational Testing Service, has the range of exper-

tise required. Furthermore, consciously or unconsciously, the contractor is influenced more by the assumed competence of the internal staff and has little incentive to question the concepts or procedures of the staff. The National Assessment, like the U.S. Census or the National Public Health Surveys, requires that its basic concepts and procedures be critically reviewed by experts and laymen from a variety of backgrounds.

Postscript

Dear Tom:

In my memorandum, I did not discuss the governance requirements for states and cities that wish to assess validly and reliably their own educational progress. I believe that the individual states and cities should govern their own assessments and the National Assessment should continue the policy of making it possible for state and city assessments to be conducted using the relevant designs and instruments developed by the National Assessment so that the results are comparable to the national results.

I recommend this because the assessment of fifty states and many more school districts present a complexity that cannot well be governed by a single board. However, each educational unit which decides to embark upon an assessment should consider establishing a structure of governance much like that recommended for the National Assessment. It should not be necessary and probably not possible for each state and city to provide all of the advisory panels recommended for the National Assessment. The national panels should be able to provide some advice to states and cities to help them deal with important issues and problems that may confront them.

APPENDIX

The appendix consists of copies of the congressional Record which contain the legislation relating to the establishment of the Assessment Policy Committee.

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

Grant or
cooperative
agreement.
20 USC 1221a.

SEC. 1242. Section 403 of the General Education Provisions Act is amended by adding at the end thereof the following new subsection:

"(k)(1) In addition to other responsibilities of the Institute under this section, the Institute shall carry out, by grant to or cooperative agreement (subject to the provisions of the Federal Grant and Cooperative Agreement Act of 1977) with a nonprofit education organization, a National Assessment of Educational Progress which shall have as a primary purpose the assessment of the performance of children and young adults in the basic skills of reading, mathematics, and communication. Such a National Assessment shall—

"(A) collect and report at least once every five years data assessing the performance of students at various age or grade levels in each of the areas of reading, writing, and mathematics;

"(B) report periodically data on changes in knowledge and skills of such students over a period of time;

"(C) conduct special assessments of other educational areas, as the need for additional national information arises; and

"(D) provide technical assistance to State educational agencies and to local educational agencies on the use of National Assessment objectives, primarily pertaining to the basic skills of reading, mathematics, and communication, and on making comparisons of such assessments with the national profile and change data developed by the National Assessment.

Management.

Assessment Policy
Committee,
establishment and
membership.

"(2)(A) The education organization through which the Institute carries out the National Assessment shall be responsible for overall management of the National Assessment. Such organization shall delegate authority to design and supervise the conduct of the National Assessment to an Assessment Policy Committee established by such organization. The Assessment Policy Committee shall be composed of—

"(i) five members appointed by the education organization of whom two members shall be representatives of business and industry and three members shall be representatives of the general public, and

"(ii) twelve members appointed by the education organization from the categories of membership specified in subparagraph (B).

"(B) Members of the Assessment Policy Committee appointed in accordance with division (ii) of subparagraph (A) shall be—

"(i) one chief State school officer;

"(ii) two State legislators;

"(iii) two school district superintendents;

"(iv) one chairman of a State board of education;

"(v) one chairman of a local school board;

"(vi) one Governor of a State; and

"(vii) four classroom teachers.

"(C) The Director of the Institute shall serve as an ex officio member of the Assessment Policy Committee. The Director shall also appoint a member of the National Council on Education Research to serve as a nonvoting member of the Assessment Policy Committee.

"(D) Members appointed in accordance with divisions (i) and (ii) of subparagraph (A) shall be appointed for terms of three years, except that (i) in the case of members appointed for fiscal year 1979, one third of the membership shall be appointed for terms of one year each and one third shall be appointed for terms of two years each, and (ii) appointments to fill vacancies shall be for such terms as

remain unexpired. No member shall be appointed to serve more than two consecutive terms.

"(3) The Assessment Policy Committee established by paragraph (2) shall be responsible for the design of the National Assessment, including the selection of the learning areas to be assessed, the development and selection of goal statements and assessment items, the assessment methodology, the form and content of the reporting and dissemination of assessment results, and studies to evaluate and improve the form and utilization of the National Assessment. Duties.

"(4) Each learning area assessment shall have goal statements devised through a national consensus approach, providing for active participation of teachers, curriculum specialists, subject matter specialists, local school administrators, parents, and concerned members of the general public. All items selected for use in the assessment shall be reviewed to exclude items which might reflect racial, sex, cultural, or regional bias. Review.

"(5) Participation in the National Assessment by State and local educational agencies selected as part of a sample of such agencies shall be voluntary.

"(6) The Director of the Institute shall provide for a review of the National Assessment at least once every three years. This review shall provide an opportunity for public comment on the conduct and usefulness of National Assessment and shall result in a report to the Congress and to the Nation on the findings and recommendations, if any, stemming from the review. Review, comments and report to Congress.

"(7) There are authorized to be appropriated \$10,500,000 for each fiscal year ending prior to October 1, 1983, to carry out the provisions of this subsection. Appropriation authorization.

NATIONAL CENTER FOR EDUCATION STATISTICS

SEC. 1243. (a) Section 406(g) of the General Education Provisions Act (as redesignated by section 1212(c)) is amended by striking out "October 1, 1978" both places it appears therein, and by inserting instead "October 1, 1983". Am. p. 2341.

(b) (1) Section 408(a) of such Act is amended by inserting "or by delegation of authority pursuant to law" immediately after "vested in him by law". 20 USC 1221e-3.

(2) Section 408(a)(1) of that Act is amended by inserting after "operation of" a comma and the following: "and governing the applicable programs administered by".

GENERAL AUTHORITY OF ADMINISTRATIVE HEADS OF EDUCATION AGENCIES

SEC. 1244. Section 408 of the General Education Provisions Act is further amended by redesignating subsections (b) and (c) as subsections (c) and (d), respectively, and by inserting immediately after subsection (a) the following new subsection: Contracts, qualifications and terms, public availability.

"(b) The administrative head of an education agency shall ensure that, in contracting under the authority of this section for the services of independent persons in the competitive review of grant applications, all such persons are qualified, by education and experience, to perform such services. The qualifications of such persons and the terms of such contracts, other than information which identify such person, shall be readily made available to the public."

(4) Section 408(d) of such Act (as redesignated by paragraph (3) of this subsection) is amended by striking out "For the purposes of

20 USC 1221e-1

for each fiscal year ending prior to October 1, 1983" and inserting in lieu thereof "\$8,000,000 for fiscal year 1985, and \$10,800,000 for each succeeding fiscal year ending prior to October 1, 1989".

(b) Section 406(g) of such Act (20 U.S.C. 1221-1(g)) is amended—

(1) by striking out "October 1, 1983" in paragraph (1) and inserting in lieu thereof "October 1, 1989"; and

(2) by striking out paragraph (2) and inserting in lieu thereof the following:

"(2) The amount available for grants and contracts by the Assistant Secretary under subsection (e) shall not exceed \$10,000,000 for fiscal year 1985, \$12,000,000 for fiscal year 1986, \$14,000,000 for fiscal year 1987, \$16,000,000 for fiscal year 1988, and \$18,000,000 for fiscal year 1989."

NATIONAL INSTITUTE OF EDUCATION

Sec. 703. (a) Section 405(kX1) of the General Education Provisions Act (20 U.S.C. 1221e(kX1)) is amended by striking out "and" at the end of subparagraph (C), by striking out the period at the end of subparagraph (D) and inserting in lieu thereof "; and", and by inserting after such subparagraph the following:

"(E) with respect to each State which voluntarily participates in accordance with paragraph (5), provide for a statement of information collected by the National Assessment for each such State."

(b) Section 405(kX3) of such Act is amended by adding at the end thereof the following: "The appropriateness of all cognitive, background, and attitude items developed as part of the National Assessment shall be the responsibility of the Assessment Policy Committee. Such items shall be subject to review by the Department of Education and the Office of Management and Budget for a single period of not more than 60 days."

COLLECTION OF DATA

Sec. 704. (a) Section 405 of the General Education Provisions Act (20 U.S.C. 1221e) is further amended by adding at the end thereof the following new subsection:

"(l) For purposes of this section, the terms 'United States' and 'State' include the District of Columbia and Puerto Rico."

20 USC 1221e-1

(b) Section 406 of such Act (20 U.S.C. 1221-i) is amended—

(1) by redesignating subsection (i) as subsection (h); and

(2) by adding at the end thereof the following new subsection:

"(i) For purposes of this section, the terms 'United States' and 'State' include the District of Columbia and Puerto Rico."

ANNUAL EVALUATION REPORTS

Sec. 705. Section 417(a) of the General Education Provisions Act (20 U.S.C. 1226(a)) is amended by striking out "November 1" and inserting in lieu thereof "December 31".

CONFLICT-OF-INTEREST

Sec. 706. (a) Section 435(b) of the General Education Provisions Act (20 U.S.C. 1232d(b)) is amended—

(1) by striking out "and" at the end of paragraph (6);

98 STAT. 2406